

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (Previously Presented): A process for fractionating a starting mixture of at least two components by extractive distillation using a selective solvent in a dividing wall column, comprising

carrying out the process in a dividing wall column having a dividing wall aligned in a longitudinal direction of the column and extending to an upper end of the column and dividing an interior of the column into a first region, a second region, and a lower combined column region,

feeding the starting mixture into the first region, taking off a first top stream from the first region, and taking off a second top stream from the second region, with each of the streams having a preset composition,

introducing the selective solvent in an upper part of the first region or in an upper part of the second region, and

setting the flow of solvent into the first region or flow of solvent into the second region so that each of the preset compositions for the top streams are met,

wherein at least one liquid stream or substream is taken off from the dividing wall column at at least one thermodynamically suitable theoretical plate, partly or completely vaporized by heat transfer from hot, degassed solvent stream, and returned to the dividing wall column.

Claim 12 (Previously Presented): A process as claimed in claim 11, wherein a stream of the selective solvent is introduced in the upper part of the first region.

Claim 13 (Previously Presented): A process as claimed in claim 11, wherein a stream of the selective solvent is introduced in the upper part of the second region.

Claim 14 (Previously Presented): A process as claimed in claim 11, wherein a side stream is taken off from the lower combined column region and laden solvent from the bottom of the column is degassed in a bottom vaporizer and taken off as a purified solvent stream.

Claim 15 (Currently Amended): A process as claimed in claim 14, wherein the ~~laden~~ purified solvent is recycled to the extractive distillation.

Claim 16 (Canceled).

Claim 17 (Previously Presented): A process as claimed in claim 11, wherein the at least one liquid stream or substream is returned to the dividing wall column at a same theoretical plate from which the liquid stream or substream had been taken off.

Claim 18 (Previously Presented): A process as claimed in claim 11, wherein the starting mixture is a hydrocarbon mixture or an aromatic mixture.

Claim 19 (Previously Presented): A process as claimed in claim 11, wherein the starting mixture is a hydrocarbon mixture of C₄ fractions or C₅ fractions.

Claim 20 (Previously Presented): A process as claimed in claim 11, wherein the starting mixture is a mixture of benzene/toluene/xylene or a mixture of isomeric xylenes.

Claim 21 (Previously Presented): A process as claimed in claim 19, wherein the starting mixture is a hydrocarbon mixture of C₄ fractions.

Claim 22 (Previously Presented): A process as claimed in claim 19, wherein the starting mixture is a hydrocarbon mixture of C₅ fractions.

Claim 23 (Previously Presented): A process as claimed in claim 20, wherein the starting mixture is a mixture of benzene/toluene/xylene.

Claim 24 (Previously Presented): A process as claimed in claim 20, wherein the starting mixture is a mixture of isomeric xylenes.

Claim 25 (Previously Presented): A process as claimed in claim 11, wherein the dividing wall is installed centrally in the column.

Claim 26 (Previously Presented): A process as claimed in claim 11, wherein the dividing wall is installed offcenter in the column.

Claim 27 (Previously Presented): A process as claimed in claim 11, wherein backscrubbing trays are provided in the region and above the feed point in which the selective solvent is introduced.

Claims 28-30 (Canceled).

Claim 31 (Previously Presented): A process for fractionating a starting mixture of at least two components by extractive distillation using a selective solvent in a dividing wall column, comprising

carrying out the process in a dividing wall column having a dividing wall aligned in a longitudinal direction of the column and extending to an upper end of the column and dividing an interior of the column into a first region, a second region, and a lower combined column region,

feeding the starting mixture into the first region, taking off a first top stream from the first region, and taking off a second top stream from the second region, with each of the streams having a preset composition,

introducing the selective solvent in an upper part of the first region or in an upper part of the second region, and

setting the flow of solvent into the first region or flow of solvent into the second region so that each of the preset compositions for the top streams are met,

wherein a side stream is taken off from the lower combined column region and laden solvent from the bottom of the column is degassed in a bottom vaporizer and taken off as a purified solvent stream, and

wherein the laden solvent is recycled to the extractive distillation.